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Abstract

An atomic layer deposition (ALD) apparatus capable of depositing a thin film on a plurality of substrates. The atomic layer deposition apparatus includes: a vacuum chamber; a reactor installed in the vacuum chamber, having a plurality of modules which can be assembled and disassembled as desired, a plurality of stages as spaces partitioned by assembling the plurality of modules, and openings which allow each stage to receive one substrate; a gas supply portion installed in the reactor, for supplying reaction gases and a purging gas to the reactor; and a plurality of gas supply lines installed in the modules, for injecting the gases from the gas supply portion into the stages.